



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------------|-----------------------------|
| 10/581,012 | 03/19/2007 | Roberto Tosi | 502343.117530 | 6961 |
| 29540 | 7590 | 03/03/2011 | | |
| DAY PITNEY LLP 7 TIMES SQUARE NEW YORK, NY 10036-7311 | | | EXAMINER TAOUSAKIS, ALEXANDER P | |
| | | | ART UNIT 3726 | PAPER NUMBER |
| | | | NOTIFICATION DATE 03/03/2011 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

rschneider@daypitney.com
kmcwha@daypitney.com
psorge@daypitney.com

| | | | |
|------------------------------|---|--------------------------------------|--|
| Office Action Summary | Application No. 10/581,012 | Applicant(s) TOSI, ROBERTO | |
| | Examiner ALEXANDER P. TAOUSAKIS | Art Unit 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 16-27 is/are pending in the application.
4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-23 is/are allowed.
- 6) ☒ Claim(s) 24 is/are rejected.
- 7) ☒ Claim(s) 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 24 is objected to because of the following informalities:

Lines 1-2, The phrase “each and as function of a mass of a value and phase of the valve” is confusing and leads to improper interpretation. It is suggested that this phrase be changed. One example may be, ---wherein each wheel a simulated mass is removed based on the mass of the wheel and a mass of a valve and a phase of the valve---.

Line 2, “of the valve wheel” should be changed to ---of the valve, the wheel---.

Claims 25-27 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. All the subject matter in claims 25-27 can be found in parent claim 16.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuchs (2,171,927) in view of Ravenhall (3,951,563).

Claim 24. Fuchs teaches a system for producing a part (11), which is to be balanced (*see column 1 lines 1-2 and Figure 5*), comprising:

a vertical lathe configured for carrying out a finishing operation and detecting the imbalance of the part (11) (*see Figure 5 and column 1 lines 25-45*), and a slide (21/22) to support a cutting tool (132) to perform a lathe turning operation (*see Figure 1 and column 2 lines 36-41*). Furthermore, note that Fuchs is capable of balancing a vehicle wheel (*see column 2 lines 29-31*).

Fuchs fails to teach a control unit capable of validating whether the imbalance is within a given limit, calculating simulated mass to be removed, and where the control unit positions the cutting tool.

Ravenhall teaches using a means to measure the imbalance on a vehicle disc wheel (*see column 1 lines 4-5 and 34-42*), checking whether the imbalance is acceptable (*see column 1 lines 41-42*), calculating a simulated mass to be removed (*see column 2 lines 29-35, where it discloses calculating the amplitude and phase of to reduce the imbalance of the wheel, and see column 2 lines 43-53, where the calculation is performed using a computer and applying Fourier analysis*) and where the computer (i.e. control unit) positions the cutting tool (*see column 6 lines 1-13*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to simulate the unbalance of a vehicle wheel before performing the cutting operation of Fuchs, as taught by Ravenhall, because it will limit potential errors in the machining operation and allow for higher precision than in the mechanical-based balancing system of Fuchs.

Note that the preamble is not accorded patentable weight because the body of the claim does not depend on the preamble for completeness, but the structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951)).

Allowable Subject Matter

Claims 16-23 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a system comprising a vertical lathe, configured for carrying out a machining finishing operation on a vehicle wheel, and a control unit capable of detecting unbalance, calculating first and second simulated masses along with simulated phases to be removed as a function of a mass of a valve and a phase of a valve, and wherein the masses are separated from each other along the wheel.

Response to Arguments

Applicant's arguments with respect to claim 24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3726

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER P. TAOUSAKIS whose telephone number is (571)272-3497. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726

Alexander P Taousakis
Examiner
Art Unit 3726

/Alexander P Taousakis/
Examiner, Art Unit 3726